



Ernest Orlando Lawrence
Berkeley National Laboratory
Berkeley, CA 94720

Operations • Facilities Division

Sitewide Water Distribution, Phase 1

PROJECT REPORT September, 2004

SPONSOR: U.S. Department of Energy
Office of Science
Office of Laboratory Operations and ES&H (SC-80)
Laboratory Infrastructure Division (SC-82)

PROJECT NO.: 01MEL-001-012

BUDGET: \$8,264,000

COMPLETION: December, 2003

DESCRIPTION: Replacement of cast iron pipe with ductile iron pipe; electrical isolation of ductile iron service lines to buildings and replacement of fire service risers; cathodic protection/electrical isolation of cement lined coated steel pipe; replacement of selected isolation valves; replacement/addition of pressure reducing stations; seismic upgrade of existing fire protection water storage tanks and application of epoxy coating to interior surfaces; installation of new fire protection water storage tank to serve the East Canyon area.

STATUS: Construction complete. Arbitration pending regarding dispute with construction subcontractor.

Project Phase	Planned % Complete	Actual % Complete
Design	100%	100%
Construction	100%	100%

PROJECT TITLE: Sitewide Water Distribution Upgrade, Phase 1

Bldg:	> Site	Architect:	> D. Truchlikova	PM:	> C. Allen
Project No:	> 01MEL-001-012	Civil Engr:	> S. Blair	PA	> S. Morgan
Account No:	> FN1100	Mech Engr:	> M. Dong	Client:	> D. Lockhart
Fund Type:	> LIP	Elect Engr:	> L. Domansky	Report Period	> 09-04
Status:	> IC	IHEM Engr:	>	NEPA/SARS	> F/F
Year Funded:	> 2001				

A. ASSESSMENT:**1. Major Accomplishments:**

1. Punchlist items complete.

2. Developments Affecting Cost Estimate & Schedule:

Change Order Status:
Original Construction Subcontract Amount: 4,688,800
\$s in Mods: 423,127
Current Subcontract Amount: 5,111,927
\$s Negotiated: 1,308
*\$s Pending Neg: 0
Total Future Changes: 1,308
Potential Future Subcontract Amount: 5,113,235

* Does not include GBI claim amount for safety shutdown, PM & Calvin Road costs (\$571k) and \$171k for tank painting.

3. Brief Assessment of Overall Project:

1. Beneficial Occupancy Dec 17, 2003 - CD-4 Issued.
2. March 05 date set for arbitration. Sept 10, 2004 deadline date set by AAA for any addl amounts to be claimed from GBI.
3. Unilateral modification issued to close out all outstanding issues with GBI from LBNL position.
4. Contingency increased to reflect the assessment in Modification #13 of Liquidated Damages for delayed completion of the work. GBI is very likely to add the amount of Liquidated Damages (\$70K) to their claim amount.

<u>No.</u>	<u>FY2004 Milestones (DRAFT)</u>	<u>Planned</u>	<u>Forecast</u>	<u>Actual</u>
11	Beneficial Occupancy	Dec-03	Dec-03	Dec-03

4. Environmental/Safety Documentation:

ORIGINAL SCOPE		
NEPA Approval:	12/06/01	(Revised)
CEQA Approval:	03/16/00	
SARS Approval:	3/16/00	

B. WORK PERFORMED:					
WBS	Description	Physical Progress (%)			
		Plan		Actual	
1.	ED&I Title I	100%		100%	
	Title II	100%		100%	
	Title III	100%		99%	
2.	Construction	100%		100%	

C. PROJECT SCHEDULE:		Day(Mo/Yr)					
WBS	Description	Plan		Forecast		Actual	
Ø.	Project Authorization						
1.	Engr'g, Design & Inspection						
	Title I Authorization (CD-1)	01-01				01-01	
	Title I Start	01-01				02-01	
	NEPA Approval	08-00				03-00	
	SARS Approval	08-00				03-00	
	• Title I Completion	03-01				05-01	
	Title II Authorization (CD-2)	04-01				06-01	
	Title II Start	04-01				06-01	
	Release For Bid	10-01				11-01	
	Receive Bids	12-01				01-02	
	• Title II Completion	01-02				02-02	
	Title III Authorization	01-02				12-01	
	Title III Start	01-02				02-02	
2.	Construction						
	• Approve Construction Start (CD-3)	02-02				12-01	
	Subcontract Award	01-02				02-02	
	Construction Complete	12-03				12-03	
	• Approve Start of Operation (CD-4)	12-03				12-03	
	Title III Completion	03-04		10-04			

D. COST REPORT:		Amount (\$K)					
	Est. to	Cost	Liens	Total	Appvd.	Cost	Percent
1. Engr'g, Design & Insp.	16	1,624	20	1,640	1,540	1,640	99%
2. Construction	23	5,862	-199	5,885	5,950	5,885	100%
3. Standard Equipment	0	0	0	0	0	0	0%
4. Project Management	3	442	0	445	460	445	99%
Subtotal	42	7,928	-179	7,970	7,950	7,970	99%
5. Contingency	294	0	0	294	314	294	0%
Total (\$K)	336	7,928	-179	8,264	8,264	8,264	96%
Change Since Last Report	-27	27	-19	0	0	0	
Percent Spent (B/D) = > 96% Total Obligation (B+C) = > \$7,749 DOE/OAK Authorization to date = > \$8,264							

WBS NO.		WBS ELEMENT		TOTAL BUDGET	FY 2001								FY 2002								FY 2003								FY 2004																
					1				2				3				4				1				2				3				4												
					O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S					
36464.000	1.1	Engineering, Design & Inspector																																											
		1.1.1 LBNL Activities																																											
		1.1.1.2 Title I		41				20/20			21/21																																		
		1.1.1.2 Title II		124							26/26			39/39			45/45			14/14																									
		1.1.1.3 Title III		185													8/8			48/48			28/28			26.5/26.5	18/18		28/28			14/14			14.5/14.5										
		1.1.1.4 Inspection		295													3/3			21/21			28/28			65.8/65.8	63/63		57/57			48/48			9.2/9.2										
		1.1.1.5 Consultants		99							20/20			25/25			7/7			0/0			1/1			2/2			9/9			14/14			7/7			8/8			6/6				
		1.1.2 Architect/Engineer																																											
		1.1.2.1 Title I		126				10/10			116/116																																		
		1.1.2.2 Title II		503							390/39			53/273			38/110			0/22			0/37																						
		1.1.2.3 Title III		218	105/0															0/24			0/56			46/88	19/7		0/7			0/5			70/53										
		1.2 Construction																																											
		1.2.1 Utilities		5940	0/0			2/2			5/5			35/15			16/6			3535/35			79/543			94/749			315/1462	1227/486		160/783			35/814			437/1040							
		1.3 Relocations		0																																									
		1.4 Standard Equipment		0																																									
	1.5 Project Management		433	1/1			26/26			28/28			21/21			38/38			30/30			49/49			49/49			55/55			50/50			32/32			18/18			12/12			24/24		
	Subtotal		7964							943/687									4133/1953																										